

United States
Department of
Agriculture

Natural Resources Conservation Service

## TECHNICAL NOTE

Huron, South Dakota

**AGRONOMY TECHNICAL NOTE NO. 12** 

**MARCH 6, 2001** 

## CP15B, ESTABLISHMENT OF PERMANENT VEGETATIVE COVER (CONTOUR GRASS STRIPS) ON TERRACES Gregory Yapp, Resource Conservationist

Farm Service Agency (FSA) Notice CRP-372, dated August 30, 2000, authorized practice CP15B, Establishment of Permanent Vegetative Cover (Contour Grass Strips) On Terraces for continuous CRP signup. This practice provides conservation planners a new dimension in the establishment of resource management plans on cropland. The practice allows seeding grass on terraces that are beyond the life span of any state or federal program and are still considered functional.

For CP15B to be utilized, the terrace system must be functional. Functional terraces are defined as having at least 50 percent of the designed capacity. If the terrace is determined to be non-functional; repairs must be made at the applicant's expense, by filling low areas and elevating ridges, to be eligible for practice CP15B.

The CRP-372 notice allows seeding grass on the terrace, if needed and feasible, to ensure that the long-term functions of the terrace are maintained. Included in CP15B is the terrace itself and up to a 10-foot buffer above the cut slope of the terrace channel, and up to a 10-foot buffer below the end of the fill slope of the terrace ridge. A minimum width should be used to solve the resource concern but the maximum width cannot exceed 60 feet, including the buffers. If areas of the terrace are presently in vegetative cover, those areas are not eligible.

For broad-based gradient terraces, dense grass stands covering the entire channel will increase the needed flow depth by 50 percent. To eliminate the need to increase channel capacities, an increase in residue levels on the cropland between terraces is necessary. In high residue systems such as no-till and those systems with 50 percent or more surface cover, the entire terrace may be seeded, not to exceed 60 feet. In low residue management systems, the permanent vegetative cover seeded on the terrace should be limited to the front slope, back slope, and the 10-foot buffer below the end of the fill slope of the terrace ridge. Establishing grass only on the ridge portion of the channel has no significant impact on the flow depth of the terrace.

Contour grass strips on terraces will be alternated with wider cultivated strips. When planning the system, it is advisable to parallel the cropped land between the grassed terraces whenever possible. The maximum size standard allows for a 10-foot buffer above the channel cut slope and below the toe of the back slope. If the seeding covers only the ridge of the terrace, the 10-foot buffer would only apply below the toe of the back slope. The maximum would then be determined by adding the average width of the terrace ridge and the 10-foot buffer below the terrace ridge not to exceed 60 feet.

When terraces are established to grass, it naturally promotes contour farming, enhancing sheet and rill erosion control. This practice also eliminates gully and ephemeral erosion from concentrated flow that is associated with nonfunctional terrace systems.

Every terrace in the field does not have to be grassed under the provisions of this practice. The planner should try to include those areas of least production, of greatest erosion potential, and closest to water conduits. Not seeding each terrace will still promote contour farming, but the planner should be aware of terrace alignment and take advantage of the natural alignment to provide the best farming conditions possible when implementing this practice.

Seeding mixes consistent with practice standard and specifications for Contour Buffer Strips (332) and Critical Area Planting (342) will be used to provide cover consistent with the desires of the land user. For fields where the sheet and rill erosion exceeds "T," it is suggested to use seeding mixes in Critical Area Planting (342) to increase survival and speed of establishment on the more erosive areas.

Grassed terraces provide an area for wildlife and large numbers of predatory insects that enhance pest management without added cost to the producer. The area may also harbor pests that are potentially damaging to crops. Scouting for pests early provides the opportunity to use the grass strips as trap areas and treat problems prior to field infestations.

The attached CP15B worksheet will be completed by the Natural Resources Conservation Service (NRCS) to document that CP15B practice requirements have been met. The worksheet will be provided to the FSA County Committee and maintained in the producer case file.

The NRCS component practice for CP15B that may be used for reporting purposes is Contour Buffer Strips (332).

This practice code may be reported in the Performance and Results Measurement System for all CP15Bs when the practice standard 332 is met. Do not report any acreage that was previously reported through the NRCS reporting system.

KONALD NADWORNICK
State Resource Conservationist

Attachment

File under Agronomy

## **CP15B WORKSHEET**

SUPPORTING DOCUMENTATION FOR PRACTICE CP15B - ESTABLISHMENT OF PERMANENT VEGETATIVE COVER (CONTOUR GRASS STRIPS) ON TERRACES -CONTINUOUS CRP-

IAME:	: LEGAL DESCRIPTION:		DATE:
Broad Based Terrace		Push U	p Terrace
Cut Slope Channel	N. abote		Channel Upslope feet
verage terrace spacing as measured from aeria			
original design storage capacity			
xisting storage capacity: Terrace #1			
Terrace #4	sq. ft. Terrace #	5	sq. ft. Terrace #6sq. ft.
YES NO  Are the offered terraces under	YES	NO	Are the offered terraces at or above 50%
practice life span?			of the original design capacity?
Are the offered terraces curre established to permanent vegetative cover?	ntly		Are contour grass strips on offered terraces alternated with wider cultuvated strips?
Are the offered terraces free of breaks and washouts and do meet the definition of function	they		Is the CP15B practice purpose of enhanced water quality and/or reduced soil erosion met by establishing permanent vegetative cover on the terrace(s)?
errace numbers:	_	Terrace	numbers:
10ft. Max. Highlight Area to be seeded	10ft.		10ft Max
description 4 4 5 4 5 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6	Max		Highlight Area to be seeded 10ft. Max
Checked by		Certified	i by
niconco by	Date	OCI tinet	Date